

YNA-P060

Handheld Vector Network Analyzer | 100 kHz to 6 GHz

At a Glance

The YNA-P060 delivers high-quality two-port S-parameter measurements, featuring a high-performance directional coupler with ≥ 40 dB effective directivity and a professional receiver design providing 100–120 dB dynamic range. It combines excellent portability with an interactive experience comparable to a benchtop VNA, featuring a 10.1-inch high-resolution, high-brightness touchscreen and weighing only 1.4 kg. This combination of professional performance and portability enables easy deployment and operation in both the laboratory and the field.



High Usability and Measurement Confidence

The YNA-P060 can be paired with the ECB-60 electronic calibration module and verified amplitude- and phase-stable cables to form a complete test solution. The dedicated ECB-60 significantly simplifies calibration while providing sufficient accuracy for most applications. The verified cables help prevent measurement errors caused by poor cable performance. Together with VNStudio, the YNA-P060 provides an interactive experience comparable to, or even more convenient than, a benchtop VNA, making instrument setup, calibration, and S-parameter measurements more intuitive and efficient.

Key Features

Specification	YNA-P060
Frequency range	100 kHz to 6 GHz
Number of ports	2 ports
Directional coupler	High-performance directional coupler with effective directivity ≥ 40 dB
Output power	-35 dBm to +5 dBm
Dynamic range	100 dB to 120 dB (typ.)
Trace noise	≤ 0.003 dBrms (typ.)
IF bandwidth	15 Hz to 75 kHz
Sweep speed	150 μ s/point at 75 kHz IF bandwidth
Electronic calibration module	ECB-60 (standard)
Test cables	Amplitude- and phase-stable cables (standard)
Remote commands	Supports SCPI commands
Battery life	5-hour battery life with power bank support
Portable design	1.4 kg with a 10.1-inch multi-touch display

YNA-P060 Interface Description





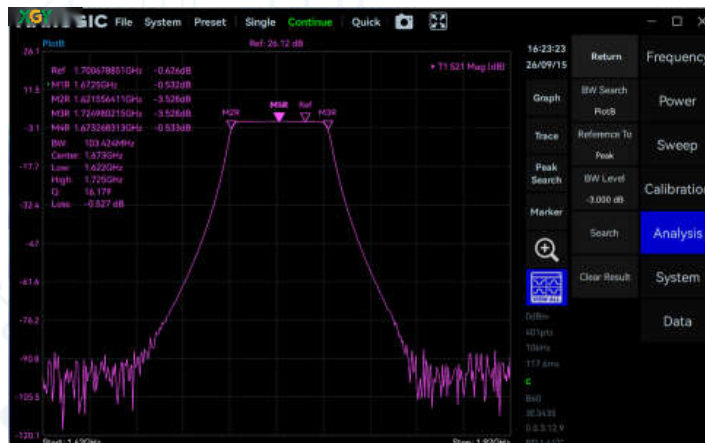
Flexible Sweep and Scenario Configuration

Supports linear frequency, logarithmic frequency, power, and CW sweeps, with configurable IF bandwidth, sweep points, averaging, and dwell time. Built-in measurement scenarios for typical devices allow quick recall of sweep and trace configurations for efficient setup.



Automatic Search and Analysis

Supports bandwidth and X dB searches for quick extraction of key frequency characteristics from traces. DTF analysis converts frequency-domain measurements to the time or distance domain, with multiple transform modes, display formats, and window functions to help locate impedance discontinuities in cables and other devices.



Frequency

Specification	YNA-P060
Frequency range	100 kHz to 6 GHz
Frequency resolution	≤ 10 Hz
Reference clock	Internal or external
Frequency stability	< ± 2.5 ppm
Aging rate	≤ 1 ppm/year
Sweep points	11 to 65535
IF bandwidth range	15 Hz to 75 kHz

S-Parameter Measurement Capability

Dynamic range at 15 Hz IF bandwidth. See Specification Conditions (1).

Specification	YNA-P060
100 kHz to 1 MHz	90 dB, 100 dB (typ.)
1 MHz to 10 MHz	100 dB, 105 dB (typ.)
10 MHz to 3 GHz	115 dB, 120 dB (typ.)
3 GHz to 4.5 GHz	110 dB, 115 dB (typ.)
4.5 GHz to 6 GHz	110 dB, 115 dB (typ.)

Corrected System Performance (typ.)

See Specification Conditions (2).

Specification	85033E Mechanical Calibration Kit	ECB-60 Electronic Calibration Module
Directivity		
100 kHz to 1 MHz	45 dB	32 dB
1 MHz to 10 MHz	50 dB	45 dB
10 MHz to 4.5 GHz	50 dB	48 dB
4.5 GHz to 6 GHz	44 dB	42 dB
Load match		
100 kHz to 1 MHz	40 dB	30 dB
1 MHz to 10 MHz	46 dB	44 dB
10 MHz to 4.5 GHz	48 dB	46 dB
4.5 GHz to 6 GHz	44 dB	42 dB
Source match		
100 kHz to 1 MHz	42 dB	25 dB
1 MHz to 10 MHz	46 dB	44 dB
10 MHz to 4.5 GHz	46 dB	38 dB
4.5 GHz to 6 GHz	42 dB	32 dB
Transmission tracking		
100 kHz to 1 MHz	± 0.05 dB	± 0.15 dB
1 MHz to 10 MHz	± 0.03 dB	± 0.05 dB
10 MHz to 4.5 GHz	± 0.02 dB	± 0.08 dB
4.5 GHz to 6 GHz	± 0.02 dB	± 0.15 dB
Reflection tracking		
100 kHz to 1 MHz	± 0.05 dB	± 0.40 dB
1 MHz to 10 MHz	± 0.03 dB	± 0.05 dB
10 MHz to 4.5 GHz	± 0.03 dB	± 0.06 dB
4.5 GHz to 6 GHz	± 0.03 dB	± 0.10 dB

Trace Noise

Specification	YNA-P060
10 MHz to 6 GHz; 1 kHz IF bandwidth	0.003 dBrms / 0.02 degree rms (typ.)

Sweep Speed

10 MHz to 6 GHz; 201 points.

Specification	75 kHz IF bandwidth	10 kHz IF bandwidth	1 kHz IF bandwidth
Uncalibrated or one-port calibration	45 ms	61 ms	250 ms
Two-port calibration	51 ms	85 ms	450 ms

Power

Specification	YNA-P060
Range: 100 kHz to 10 MHz	-35 dBm to -4 dBm
Range: 10 MHz to 6 GHz	-35 dBm to +5 dBm
Resolution	0.25 dB
Accuracy	± 1.5 dB

General

Specification	YNA-P060
RF ports	Port 1 and Port 2, N (F), impedance 50 Ω . Damage input level: +20 dBm or $\pm$ 35 VDC.
Power	USB PD (65 W), supports power bank operation
USB ports	USB 3.0 Type-C $\times$ 1, USB 2.0 Type-C $\times$ 1, USB 2.0 Type-A $\times$ 1
Ethernet port	RJ45, 1000 Mbps, supports remote control over LAN
Video and audio interfaces	Micro HDMI $\times$ 1 (supports external display), 3.5 mm headphone jack $\times$ 1
External reference clock input	MMCX (F), 10 MHz, allowable input level: -8 dBm to +10 dBm
External trigger input	MMCX (F), 3.3 V CMOS, high impedance
Trigger output	MMCX (F), 3.3 V CMOS, high impedance
Display	10.1-inch IPS LCD, 1280 $\times$ 800, multi-touch
Power consumption	$\leq$ 15 W
Operating time	5 hours (typ.)
Dimensions (L $\times$ W $\times$ H)	260 $\times$ 185 $\times$ 46 mm
Weight	$\leq$ 1.4 kg
Operating temperature (ambient)	0 to 50 $^{\circ}$ C
Storage temperature (ambient)	-20 to +70 $^{\circ}$ C
Operating relative humidity; ambient 0 to 40 $^{\circ}$ C	5 to 75%
Operating relative humidity; ambient > 40 $^{\circ}$ C	5 to 45%

Specification Conditions

- (1) Dynamic range: IF bandwidth of 15 Hz, output power of +5 dBm; ambient temperature of 25 °C (± 3 °C), with a deviation from the calibration temperature of < 1 °C.
- (2) Corrected system performance: IF bandwidth of 15 Hz; ambient temperature of 25 °C (± 3 °C), with a deviation from the calibration temperature of < 1 °C.
- (3) Typical and nominal values are not guaranteed and do not include measurement uncertainty.
- (4) Calibration includes SOLT and isolation calibration by default.
- (5) Specifications are subject to change with hardware and software revisions without notice.

Standard Accessories

Specification	YNA-P060
Electronic calibration module	ECB-60, 100 kHz to 6 GHz
RF test cable	CKB Series armored amplitude- and phase-stable RF cable

Packaging Accessories

Specification	YNA-P060
YNA-P060 main unit	1
Power adapter	1
Power cord	1
ECB-60 electronic calibration module	1
Matched loads	2
USB cable	1
CKB Series armored amplitude- and phase-stable cables	2
SMA female-to-female adapter	1
Wrench set	1

YNA-P060 Measurement Kit Overview



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